

Background

Every two years the Energy Policy Division of the Department of Community, Trade, and Economic Development (CTED) is required by state law to deliver an energy report to the governor and legislature.¹ The report focuses on implementation of the state energy strategy (SES) and other key energy issues. CTED has decided to use the 2003 Biennial Report as an opportunity to update the electricity portions of the 1993 State Energy Strategy.²

During this process, CTED concluded that there was a need for a more regular method to turn strategy directions into measurable goals and objectives. Thus it intends to use this document as a starting point for continued engagement with its key stakeholders and the general public during 2003 as it develops an action agenda (see Section 3 for more details).

The readers of this report will note many references to dramatic changes in the electricity industry since the original energy strategy was produced in 1993. In some sense it appears that change has been the only constant since that time. Some chapter titles from previous biennial reports illustrate that change:

1995 – Restructuring the Electric Utility Industry and New Era for the Bonneville Power Administration

1997 – The Electricity Industry in Washington – Turmoil and Transition

1999 – Challenges and Opportunities for Washington's Energy Future

Change and uncertainty have become the watchwords of the electricity industry. But with the advent of the first harbingers of the “perfect electrical storm” emerging in the summer of 2000, change and uncertainty reached new levels.

A Note on Other Energy Issues

Previous biennial reports have included information and analysis of many other topics beyond electricity, such as petroleum and natural gas supply and price, energy emergency and security, economic development, greenhouse gases, and transportation. With the exception of the information in Appendix D on clean vehicles (as required by ESHB 2522), this report does not address non-electric energy issues. However, CTED is actively involved with other energy issues. These include:

- ♦ *updating the state's petroleum emergency planning;*
- ♦ *assisting in the state's terrorism planning and preparedness efforts, especially energy infrastructure;*
- ♦ *supporting non-electric clean energy industries such as biofuels;*
- ♦ *analyzing natural gas issues and trends;*
- ♦ *developing greenhouse gas mitigation strategies; and*
- ♦ *maintaining the state's repository of energy data.*

Updates on these, as well as other energy policy documents, are available at the CTED Energy Policy Division website www.energy.cted.wa.gov

The “Perfect Electrical Storm” Pushed Electricity and Energy to the Forefront

Electricity price increases, blackouts in California, and fears of supply disruptions in the Northwest in 2000 and 2001 have been called the electricity system's equivalent of the “Perfect Storm” – a juxtaposition of events and actions that drove wholesale electricity prices in the western United States to unprecedented levels. During that period, Washington and the Northwest experienced one of the most

severe droughts ever recorded as hydroelectric output fell to 30 percent below normal. California's electricity restructuring experiment failed, generating more than 30 blackouts throughout that state. Natural gas prices spiked to levels ten times higher than normal. And companies such as Enron allegedly developed market manipulation schemes such as "Death Star" to extract billions of dollars from the wholesale market.

While Washington and the Northwest were able to avoid California-style blackouts, we certainly did not emerge from the storm unscathed. Wholesale (and eventually retail) electricity prices jumped dramatically, industries had to curtail operations or, in the case of aluminum smelters, shut down completely. Utility arrearages and disconnections skyrocketed, and there was more media and citizen attention to energy and electricity issues than at any time since the days of the oil embargos. Although wholesale electricity and gas prices fell dramatically in 2002, the debt incurred to pay off those high wholesale prices will be reflected in retail utility rates for several years. Ironically, falling wholesale electricity prices created new problems for some utilities, especially the Bonneville Power Administration (BPA), as they had hoped to recoup their early expensive purchases with surplus sales into a higher priced wholesale market.

Washington State's Response to the Perfect Storm

The Energy Policy Division of CTED was actively involved in helping state government manage the crisis. Governor Locke testified before Congress, held several press conferences, and made numerous public service announcements and speeches explaining the state of affairs and urging individual, state, and federal actions to help alleviate the crisis.³ The Governor directed all state agencies to decrease their use of both electricity and natural gas by ten percent or more.⁴ And in response to electricity supply concerns, Governor Locke issued several energy supply alerts that allowed for temporary emergency generation with provision for air quality mitigation actions.⁵

The state legislature also responded by enacting several significant energy bills such as changes in power plant siting requirements (EHB 2247), incentives for renewable energy production (HB 1839 and SB 6107), and an appropriation for low-income citizens impacted by high prices (HB 2222).

The Changing Electricity Policy Environment

In addition to the consequences of the "storm," there have been major changes in regional and national electricity policy that have generated a need to reexamine the State Energy Strategy.

The federal Energy Policy Act of 1992 was the major driver for a new competition-based system in the wholesale electricity market. As a consequence of wholesale competition, independent power producers (IPPs) with no direct ties to a specific utility or utility load were seen as the model for meeting future supply needs. The Federal Energy Regulatory Commission (FERC) issued rules to institute "open access" to the nation's electricity grids and then expanded those efforts to include creation of Regional Transmission Organizations (RTOs) and a national Standard Market Design (SMD).

In 1996, the four Northwest governors charted a regional process for the *Comprehensive Review of the Northwest Energy System*, largely in anticipation of open retail access throughout the region. Some states, including California, Oregon, and Montana, chose to restructure their retail electricity systems to provide for some level retail access for electricity. Washington State declined to do so.

These and other electricity policy issues have been discussed in previous biennial reports and continue to engage CTED, the Governor's office, the Utilities and Transportation Commission (UTC), and the legislative branch. Many of these issues and policies such as SMD and the future role of BPA are ongoing.

This fluid and uncertain electric policy environment underscored the need for Washington to reexamine its strategic vision and directions and to have a process to

regularly and systematically respond to such changes.

Relationship of the SES update to the Northwest Power Planning Council's Fifth Power Plan

One of the principal responsibilities of the Northwest Power Planning Council (NWPPC) is to develop periodically a regional power plan. NWPPC produced its last revised power plan in 1998 and is currently scheduled to complete its fifth plan later in 2003. As part of its planning process, the NWPPC uses its substantial quantitative analytical resources that include demand modeling, risk modeling, price analysis and forecasting, conservation resource estimation, and supply side analyses. Because Washington is a member of the NWPPC – a multi-state compact of the four Northwest states – state government does not need to develop these types of analytical tools and capabilities. Since the Northwest is an integrated electricity system, it is also most appropriate to undertake such modeling and analysis at a regional scale.

Why then shouldn't Washington simply rely on NWPPC's work as a de facto electricity strategy? There are a number of compelling reasons for Washington to develop its own strategy update.

- ◆ Unlike most other states (such as Oregon), Washington is not predominantly served by investor-owned utilities (IOU), but is made up of 63 public utility districts, municipal utilities, cooperatives, and IOUs. The state's electricity policy is driven by a mix of state regulation (via the UTC) and local decision-making.
- ◆ Seven of the region's ten aluminum smelters are located in Washington, making the regional and local impacts of smelter viability particularly significant.
- ◆ Most of the region's hydroelectric capacity is within Washington's borders.
- ◆ BPA provides nearly 50 percent of Washington's electricity supply.
- ◆ Washington has a unique and particularly complex set of institutions involved in establishing electricity policy (see

Appendix A for a more detailed discussion).

Current law also requires that the State Energy Strategy be updated periodically.

Process

During the 2002 legislative session, a bill was introduced requiring CTED to update the State Energy Strategy by December 31, 2002. Although that legislation did not pass, CTED reached agreement with the House and Senate Energy Committee chairs and the Governor's office on a process to do so.

CTED, in close cooperation with the Governor's office, began the update during the summer of 2002. (It was determined that an effective strategy would require the participation of a wide range of interests both to provide CTED with insight into the industry and to help shape overall electricity policy directions).

To involve interested parties, CTED formed a SES Advisory Committee comprised of 19 individuals representing the legislature, electric utilities, businesses, labor, environmental organizations, low-income advocacy groups, and state agencies. The committee held five full-day meetings during the summer and fall of 2002.⁶ At those meetings, the members received briefings and held discussions on:

- ◆ the general electricity situation;
- ◆ financial markets and electricity;
- ◆ natural gas issues related to electricity generation and supply;
- ◆ environmental impacts of electricity;
- ◆ energy efficiency and renewable generation;
- ◆ regional and national electricity issues (RTO, SMD, BPA's future); and
- ◆ impacts of high electricity prices on low-income, business, industry, and utility sectors.

Where possible, CTED used the expertise and knowledge of the committee members to provide information on these issues.

The SES Advisory Committee stated, and CTED agreed, that the development of a set of guiding principles for state electricity policy was a critical aspect of the update. Members of the committee worked closely with CTED staff to craft a set of 13 principles that the committee believed represented a consensus of the group. These principles are set forth and discussed in Section 2.

As CTED and the committee moved forward in the process, they recognized they would not be able to fully translate those principles into specific goals, objectives, and action items by the report deadline. However, because this translation process is vital, CTED will be using this document as a basis for further elaboration of the principles into specific objectives with measurable outcomes and timelines. It will begin that process, continuing to involve committee members and the general public in the spring and summer of 2003. This is discussed in more detail in Section 3.

For the update CTED developed a substantial amount of quantitative information on the electricity system and crisis of 2000/01. In previous biennial reports, it has included a set of energy indicators which presented data on Washington State energy use, production, cost, and impacts. They have typically been relatively high-level information with a one or two-year time lag due to data availability. CTED recognized that although such information remains valuable (especially as it highlights long-term energy trends), the limited focus on electricity data and the time lags made it less useful for the SES update process. Consequently, Section 4 of this report contains a new compilation of data emphasizing more detailed, near-term electricity information. Although the other non-electricity energy indicators are not included in this biennial report, they are available on the CTED Energy Policy Division web site at www.energy.cted.wa.gov.⁷

The report contains several appendices. Appendix A illustrates the institutions and resulting complexity involved in the development and promulgation of state electricity policy. Appendix B summarizes

comments received at two public meetings on the strategy update. Appendix C contains statements submitted by members of the advisory committee who wanted to elucidate specific issues or concerns. Appendix D has been included in response to a legislative requirement in ESHB 2252 that CTED report on clean vehicle purchases by state government. Appendix E provides a list of acronyms and abbreviations referenced throughout this report. And finally, Appendix F details a staff directory and topical index for the CTED Energy Policy Division.

1 RCW 43.21F.045

2 Washington State Energy Strategy- An Invitation to Action, WSEO 92-158, January 1993.
<http://www.energy.cted.wa.gov/STRATEGY1.HTM>

3 See www.governor.wa.gov/energy/energy.htm

4 Governor's Directive No. 01-01 available at <http://www.governor.wa.gov/eo/dir01-01.htm>. Overall executive branch agencies were able to achieve the 10% savings.

5 The Governor's Energy Orders are available at <http://www.governor.wa.gov/energy/orders.htm>

6 A membership list with contact information is available at <http://www.energy.cted.wa.gov/Energy%20Strategy/Energy%20Strategy%20Advisory%20Committee%20Members.pdf>

7 www.energy.cted.wa.gov. These indicators are scheduled to be posted in late February 2003.